

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
14 July 2005 (14.07.2005)

PCT

(10) International Publication Number
WO 2005/064555 A1

(51) International Patent Classification⁷: **G07F 7/10**

Glasgow G46 6RB (GB). **BRESLIN, Anthony** [GB/GB];
21 Strathnairn Avenue, East Kilbride, Scotland G75 8FW
(GB).

(21) International Application Number:
PCT/GB2004/005434

(74) Agent: **HARLAND, Linda, J.**; Reddie & Grose, 16
Theobalds Road, London WC1X 8PL (GB).

(22) International Filing Date:
23 December 2004 (23.12.2004)

(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0330179.3 30 December 2003 (30.12.2003) GB

(71) Applicant (*for all designated States except US*): **ECEBS
LIMITED** [GB/GB]; Ecebs House, 68 Dobcroft Road,
Millhouses Sheffield, South Yorkshire S7 2LS (GB).

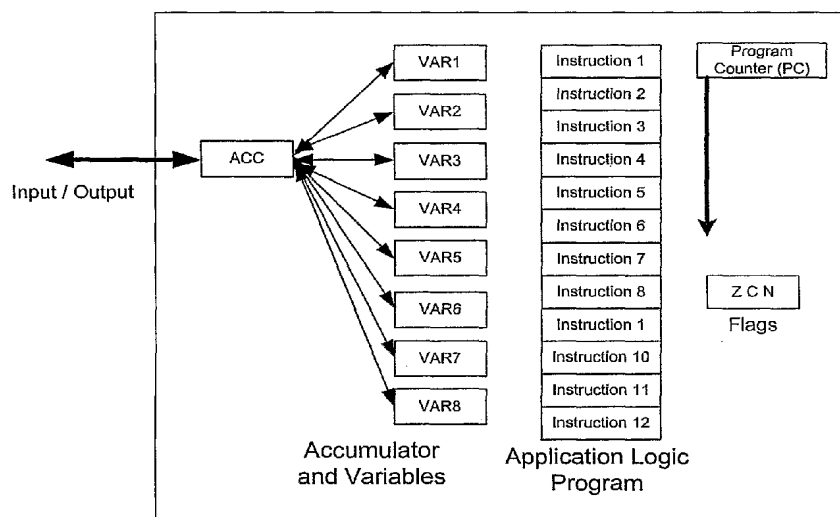
(84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **HOCHFELD,
Barry, Sim** [GB/GB]; 21 Dalsersf Crescent, Giffnock,

[Continued on next page]

(54) Title: SMARTCARD SYSTEM



(57) Abstract: A programmable device, for example, a smartcard carries a file system and operating software enabling the on-device file system to interface with at least one off-device file and/or application at a terminal or interface device. The smartcard includes means such as a script engine for running a script command to modify the structure and content of the file system, or the commands to be used for accessing the file system, or any security conditions associated therewith. In the improved smartcard of the invention the script engine is operable to run a plurality of script commands in succession and to use an input/output buffer of the device as an accumulator to allow arithmetic operations on values held in data files or in the accumulator itself under the control of one or more of said script commands. This allows the system to provide for arithmetic operations, such as ADD, SUBTRACT or COMPARE, or other similar customised operations.

WO 2005/064555 A1



SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*